

Boiler GACT 40 CFR 63 Subpart JJJJJJ (6J) Are You In Compliance?

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Land Use and Environmental Services Agency
Air Quality Division

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Boiler GACT 6J

If your site operates a boiler and you are not classified as a major source, you are subject to the boiler GACT.

The compliance date for existing boilers was March 21, 2014!!

Is your site in compliance?!?





Don't Worry Because.....

Gas-fired boilers are exempt!!!

Other exemptions :

- Hot water heaters (capacity <120 gallons)
- Electric boilers
- Residential boilers
- Temporary boilers
- Boiler regulated under another GACT/MACT
- Boilers burning waste and covered under incinerator rules
- Research and development boilers (does not include boilers that primarily provide steam to a process or heat at a research and development facility)
- Boilers used as a control device to comply with another Subpart of Part 60, 61, 63 or 65
- Electric Utility Steam Generating Units (EGUs) covered by Part 63 Subpart UUUUU
- Boilers required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE





Are you in Compliance?

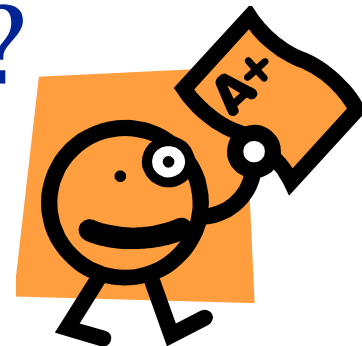
Existing Boilers (constructed on or before June 4, 2010),
have you completed...

- Existing boilers ≤ 10 MMBtu/hr
 - Tune-up
- Existing boilers ≥ 10 MMBtu/hr
 - Oil and biomass boilers:
 - One time energy assessment (except limited use)
 - Tune-up
 - Coal-fired boilers:
 - One time energy assessment (except limited use)
 - Performance testing for CO and Hg
 - Minimize startup and shutdown periods and conduct startup and shutdowns in accordance with manufacturer's recommendation





Are You in Compliance?



Have you submitted...

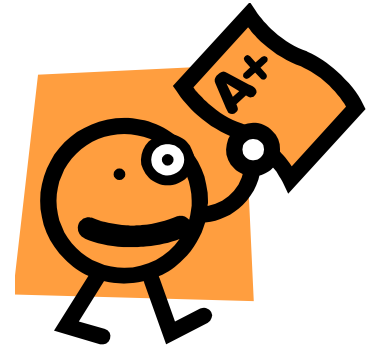
Notification of Compliance Status (NOCS) is due
July 19, 2014!!

The NOCS should be submitted electronically using EPA's Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX)

You should have submitted your initial notification on or before January 20, 2014.



Continuing Compliance



- **Tune-ups** are required every **2 years**
 - Oil-fired boilers ≤ 5 MMBtu/hr, seasonal boilers, limited use boilers, and boilers with O_2 trim systems - due every 5 years
- **Stack testing** is required every **3 years**
 - If PM emissions are \leq half the PM emission limit, no further testing required
- **Fuel analyses** for Hg is required **quarterly**
 - If Hg emissions are \leq half the Hg emission limit, no further testing required
- **Fuel Switch/Change Notification**
 - if you have switched fuels or made a physical change to the boiler, notification is due within 30 days of the change



What about New Boilers



- New boilers ≤ 10 MMBtu/hr
 - Tune-ups every 2 years after startup
 - Oil-fired boilers ≤ 5 MMBtu/hr, seasonal boilers, limited use boilers, and boilers with O₂ trim systems - due every 5 years after startup
- New boilers ≥ 10 MMBtu/hr
 - Tune-up (except for coal-fired boilers)
 - PM, Hg, and CO emission limits
 - Minimize startup and shutdown periods and conduct startup and shutdowns in accordance with manufacturer's recommendation (except seasonal oil or biomass boilers)

*New boilers – constructed after June 4, 2010



New Coal, Oil or Biomass Boilers

- Tune-ups are due no later than 25 or 61 months after startup (depending on tune-up frequency)
- Compliance demonstrations for PM, Hg, and CO emission limits are due within 180 days of startup
 - Testing required every 3 years, unless PM or Hg emissions are less than half the limit



Boilers Subject to Emission Limits

- May demonstrate compliance by stack testing, fuel analysis, or a continuous monitoring system (CMS)
- Stack testing will set operating limits that must be continuously monitored
- Must develop a site specific monitoring plan



Important...

Existing dual-fuel boilers that switch fuels from gas to coal, biomass, or oil remain existing sources. No stack testing required!!

New oil-fired boilers that combust low sulfur oil ($\leq 0.5\%$ sulfur) are exempt from PM emission limits provided the boiler does not use a control device. No stack testing required!!





If you have a new boiler, you need to submit...

- **Initial Notification** - within 120 days of becoming subject to the GACT
- **Notification of Intent to Conduct a Performance Test** at least 60 days before the test
- **NOCS** within 120 days of compliance date (for new sources that is upon start-up)
- If you are conducting a performance test to demonstrate compliance, the **NOCS** is due within 60 days of completing the test



GACT 6J Reports



- Must prepare an annual compliance certification report each year by March 1st
 - You only need to submit the report if there was a deviation!! Submittals are due March 15th
 - For boilers that are only required to complete a tune-up, a 2 year or 5 year compliance report is required
- Keep onsite for your inspector's review!!



Boiler GACT Resources

EMISSION LIMITS, WORK PRACTICE STANDARDS, EMISSION REDUCTION MEASURES, AND MANAGEMENT PRACTICES

(NCDAQ Summary 3-22-13 / §63.11200-11201 / See also Tables 1-3 in Subpart JJJJJ)

Source Category	Fuel Category	Heat Input MMBtu/hr	Emission Limits (EL)			Work Practice Standard Boiler tune-up every 2 or 5 yrs**	Work Practice Standard Energy Assessment (EA)	Work Practice Standard (MSS) Minimize startup/shutdown periods/mfg	Compliance Date	Initial Notification Due	Notification of Compliance Status Due								
			PM lb/MMBtu	Hg lb/MMBtu	CO ppm														
All (coal/oil/biomass) fuel-fired boilers, except any gaseous fuel-fired boilers		< 10	None			Yes	No	No	Exist: 3/21/14 New: 5/20/11 or startup, whichever is later	Same as those below	Exist: 7/19/14 New: 120 days after startup								
Any size, existing or new, limited use																			
Existing	Coal	≥ 10	None	2.2E-5	420 @3% O ₂	No	One time energy assessment	Yes	3/21/14 MSS/EA/EL	<u>Existing Sources:</u> 01/20/14	7/19/14 for MSS/EA and 60 days after stack test								
	Biomass			None	None	Yes		No	3/21/14 TU/EA		7/19/14 for TU/EA								
	Oil																		
	Seasonal (oil or biomass)																		
New	Coal	≥ 10 < 30	0.42	2.2E-5	420 @3% O ₂	No	No	Yes	5/20/11 or startup, whichever is later	<u>New Sources:</u> Within 120 days after startup or 09/17/11, whichever is later	120 days after startup for TU/MSS and 60 days after stack test								
		≥ 30	0.03			No													
	Biomass	≥ 10 < 30	0.07			Yes													
		≥ 30	0.03																
	Oil	≥ 10 < 30	0.03*	None	None			No											
		≥ 30	0.03*																
	Seasonal (oil or biomass)	≥ 10	None					No											

*Can demonstrate compliance with PM limit by combusting only oil that contains no more than 0.50 weight percent sulfur.

**Existing: <5MMBtu oil fired boilers, seasonal biomass and oil fired boilers, limited use boilers and boilers with oxygen trim systems perform tune-up by 3/21/14 then every five years;

New/recon: No initial tune-up required for new sources. <5MMBtu oil fired boilers, seasonal biomass and oil fired boilers, limited use boilers and boilers with oxygen trim systems tune-up every five years after startup.

- See Table 3 in the rule for "operating limits for boilers with emission limits" (for add-on controls, fuel analysis, stack testing, continuous O₂ monitor - required for CO standards).

- Can demonstrate compliance with the mercury limits by fuel sampling.

- Stack Testing: New sources by 9/17/11 (180 days after March 21, 2011), or within 180 days of startup, whichever is later. Existing sources: within 180 days of the compliance date.



Boiler GACT Resources

MCAQ's GACT 6J webpage:

<http://charmeck.org/mecklenburg/county/AirQuality/PermittingRegulations/Pages/Boilers.aspx>

NC DAQ's GACT 6J webpage:

<http://daq.state.nc.us/toxics/areasources/subpart6j/>

EPA's GACT 6J webpage:

<http://www.epa.gov/ttn/atw/boiler/boilerpg.html>



Questions?